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### LEESONFLEX SG-20 PURA5170 PURE POLYUREA

#### DESCRIPTION

LEESONFLEX SG-20 PURA5170 is 1:1, fast setting, spray applied two component pure polyurea coating. It is 100% solids and contains no VOCs.

It has been developed as a high strength rigid material for use as a coating onto prepared concrete. It is applied by means of a high pressure impinge mixing system at elevated temperature. The product benefits from fast film build up and quick cure times.

Typical applications include secondary containment for bonded areas, roofing and flooring, where high abrasion resistance, flexibility and durability are required.

#### PRODUCT FEATURES

Pure Polyurea	Low sensitivity to moisture during application
Zero VOCs	100% solids, no VOCs
Film Properties	High degree of flexibility combined with tensile strength gives excellent durability and abrasion resistance
Chemical Resistance	The cross-linked properties of PURA5170 give excellent resistance against a variety of chemicals such as acids, alkalis, fuels.

For specific information on using this product please consult Leeson Polyurethanes.

#### TECHNICAL DATA

Physical Properties	PU5170 Polyol	PU5170 NCO
Appearance	Black (Other Colours Available)	Straw Colour
Specific Gravity at 20°C:	1.03 g/cc	1.13 g/cc
Solids:	100%	100%
Viscosity at 23°C	550 ± 200 mPa.s	800 ± 200 mPa.s
Ratio by volume	1	1
Application thickness:	As required, typically a nominal 1.5mm dft*	
Coverage:	1sqm/L/mm	
Gel Time:	<5 seconds when sprayed	
Tack Free Time:	5 - 10 seconds when sprayed	
Spray	2K spray at 65°C and 2000 – 3000 psi Application Temperature, Substrates: +7°C to + 25°C Application Temperature, Air: +7°C to + 25°C	
Hardness, Shore A	90 - 95	
Hardness, Shore D	50 - 55	
Tensile Strength	22 N/mm <sup>2</sup>	
Elongation at Break	>450%	
Adhesion to concrete	0.5 – 3 N/mm <sup>2</sup> (full concrete failure)	

\*Application by fast set spray is a skilled operation and when budgeting for material use it is best to consider a target of 2mm for material requirements.

## APPLICATION

LEESONFLEX SG-20 PURA5170 Elastomeric coating is designed for use in applicators where a tough, seamless waterproof system is required.

### Surface Preparation

The application surface should be thoroughly cleaned to remove any loose material, dust or grease. Further information can be found in the Leeson Polyurethanes Method Statement.

### Priming – Concrete

The use of E4489 or E4568 Epoxy primer, blinded with sand, is required for use with this membrane

### Priming – Metal

The use of PU3922 blinded with sand, is required for use with this membrane.

### Application Equipment

Using plural component, heated, high pressure, impinge mixing spray equipment at elevated temperature. It is recommended that the product is applied at temperatures greater than 70°C. Equipment used must be capable of maintaining a stable high pressure and consistent volume output during application e.g. Graco EXP2 - 70°C-85°C, 1800-2500PSI.

### Mixing

Using an Air Purge spray gun a typical mix chamber is AF2929, and spray tip is FT0424, please consult Leeson Polyurethanes for more information.

### Application

By spray at rate 1.7-3kg/m<sup>2</sup>

It is recommended that the product is applied at temperatures greater than 10°C. All substrates to be coated should have a surface temperature at least 3°C above dew point to reduce delamination risk due to Condensation.

### Curing

Product is tack free in 10-15 seconds. If overcoated, this should be done immediately.

### Quality Control

For specific information on using this product please consult our method statement. A test spray should be carried out prior to installing the product to ensure ratio and machine settings are correct. Please consult Leeson Polyurethanes for details. Also, we have a Project Day Sheet, which we recommend is completed for each day of the project.

## LIMITATIONS

Do not proceed if relative humidity is >90% or if the surface temperature is <3°C above the dew point. If applying to concrete, the concrete should have achieved 75% of final strength, be free of surface laitance and be primed with one of our concrete primers (e.g. Conprime 2), fully aggregated to give a mechanical key. Substrates should be +5°C minimum during application.

If in doubt consult Leeson Polyurethanes Ltd.

PURA5170 is an aromatic polyurea, and as such, colour change will occur with UV exposure; this does not affect the physical properties.

## STORAGE

Stored in unopened original containers, PURA5170 Polyol will have a shelf life of one year.  
Stored in unopened original containers, PURA5170 NCO will have a shelf life of 6 months.  
Store between 5°C and 25°C

## HEALTH & SAFETY

Before use, ensure that you have read the relevant Health and Safety Data Sheet for this Product.  
The Company will supply, upon request, individual advice in writing in connection with the use and application of its products in all appropriate cases. Customers are urged to make use of this service. This leaflet is provided for general guidance only. All recommendations and suggestions are made in good faith but without guarantee and are subject to the Company's terms and conditions.